



Canyon Fuel Company
SUFCO Mine
397 South 800 West
Salina, UT 84654
(435) 286-4880 Fax (435) 286-4499

March 19, 2001

Ms. Kelly Coleman
Department of Environmental Quality
Division of Water Quality
288 North 1460 West
P. O. Box 144870
Salt Lake City, UT 84114-4870

John
C/04/002

Dear Ms. Coleman:

Enclosed is a copy of the 1st Quarter Acute Biomonitoring Report conducted during February for point 003A for the SUFCO Mine facility, permit number UT-0022918. The acute biomonitoring was successfully passed using ceriodaphnia.

Sincerely,
CANYON FUEL COMPANY, LLC
SUFCO Mine

Michael L. Davis

Michael L. Davis,
Environmental & Construction Supervisor

MLD:kb

Encl.:

cc: Mary Ann Wright, DOGM
Guy Pence, USFS Fishlake
Chris Hansen, Skyline
Compliance Officer, U.S. EPA, Denver
EPA Test Procedures & Water Monitoring File

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RECEIVED

DIVISION OF
OIL, GAS AND MINING

W.E.T. Inc.

Water & Environmental Testing Inc. 399 West 1200 North, B Orem, Utah 84057 (801)235-9741 Fax(801)235-9560

Acute Cover Letter

February 17, 2001

Southern Utah Fuel Co.
Attn: Ruth Wayman
397 South 800 West
Salina, Utah 84654

Received

FEB 26 2001

Canyon Fuel Company
SUFCO Mine

Dear Ruth,

Enclosed is the report for the sample dated 2/5/2001. The sample was tested for acute toxicity using Ceriodaphnia dubia following the procedures listed in EPA Section 9. This report is comprised of 6 pages which include;

Cover Letter,
Acute Whole Effluent Toxicity Report Ceriodaphnia dubia,
Region VIII guidance for Acute Whole Effluent Reporting Ceriodaphnia dubia,
Acute Whole Effluent Toxicity Chemical Report,
Data Reduction, (Not required)
Reference Toxicant Chart Ceriodaphnia dubia,
and a copy of the completed Chain of Custody.

All these pages **together** constitute the final report. If you have not received any of these pages, or if you have any questions please give us a call at 801-235-9741. We look forward to doing business with you in the future.

Sincerely,



Lee Rawlings
Lab Director

QA/QC Flags: None

Comments:

Acute Whole Effluent Toxicity Report ***Ceriodaphnia***

DATE: February 17, 2001**PERMITTEE NAME:** Southern Utah Fuel Co. **NPDES NO:** UT 0022918**OUTFALL NO:** PT 003**TEST (Animal/Age):** Ceriodaphnia <24 hours.**SAMPLE (Date/Type):** 2/5/01 Grab.**DATE/TIME TEST BEGAN:** 2/5/01 12:40 p.m.**DATE/TIME TEST COMPLETED:** 2/7/01 12:30 p.m..

TEST CONDITIONS

Ceriodaphnia dubia neonates were exposed to diluted Effluent as specified by the permit. At the end of the test period Survival was measured to determine if Acute Toxicity was present in the sample.

Animal Age at Test Start	<24 hours.
Number of Organisms/Dilution Volume/Replicates	5 organisms/15 mL/4 replicates.
Food	Fed YTC and Algae before starting test.
Aeration	None required.
Dissolved Oxygen	Measured daily old/new.
Water Replacement	Renewed daily.
Temperature	20 ± 1 degrees C.
Photo Period	16 hours light 8 hours dark.
pH	Measured initially and at 24 hours.
Dilution Water	Reconstituted water (+/- 15% hardness of the receiving water).
Receiving Water	Supplied with sample. Used for dilutions.
Sample Concentrations	Control, 6.25, 12.5, 25, 50, 100%.

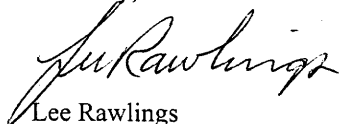
SUMMARY

Results: X Pass Fail

There was NO significant effect on survival.

Enclosed are data sheets and statistical reports.

Sincerely,

Lee Rawlings
Water & Environmental Testing, Inc.

Enclosure

Received

FEB 26 2001

Canyon Fuel Company
SUFCO Mine

Region VIII Guidance for Acute Whole Effluent Reporting

PERMITTEE NAME: Southern Utah Fuel Co. NPDES NO: UT 0022918

OUTFALL NO: PT 003

50% MORTALITY TEST: X Pass _ Fail LC50: >100%.

TEST (Animal/Age): Ceriodaphnia <24 hours.

SAMPLE (Date/Type): 2/5/01 Grab.

DATE/TIME TEST BEGAN: 2/5/01 12:40 p.m..

DATE/TIME TEST COMPLETED: 2/7/01 12:30 p.m..

Survival Totals

	Recon Water	Receiving Water	Dilutions (% Effluent)				
			6.25%	12.5%	25%	50%	100%
Initial	20	20	20	20	20	20	20
24 hrs	20	20	20	20	20	20	20
48 hrs	20	19	19	20	18	19	20

Max/Min Values

	Recon Water	Receiving Water	Dilutions (% Effluent)				
			6.25%	12.5%	25%	50%	100%
Dissolved Oxygen	7.8/7.2	Na	7.8/7.2	7.8/7.2	7.9/7.3	8.5/7.1	9.6/6.5
Temperature (°C)	21.0/20.6	na	20.8/20.6	20.6/20.6	20.6/20.4	20.6/20.2	20.6/20.0

Receiving Water used for Dilution? (Y of N) Y

Hardness, mg/L CaCO₃: Receiving Water na Recon Water 184 Effluent 488

Initial Total Residual Chlorine, mg/L Cl₂ 100% Effluent: <0.05

Reconstituted pH: Initial 8.25 After 24 hours 8.36

Receiving Water pH: Initial na After 24 hours na

pH in 100% Effluent: Initial 7.84 After 24 hours 8.36

Ammonia as N, mg/L: 100% Effluent Initial <0.05 Receiving Water <0.05 Recon Initial <0.05

Conductivity, umhos/cm: 100% Effluent 1,028 Receiving Water na

Alkalinity, mg/L CaCO₃: 100% Effluent 258 Receiving Water na

Analyst: Lee Rawlings

Laboratory: Water & Environmental Testing, Inc.

Signature: Lee Rawlings

Date: 2/19/01

Comments: _____

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Canyon Fuel Company
SUFCO Mine

Acute Whole Effluent Toxicity Chemical Result Report

February 17, 2001

CUSTOMER NAME:

Southern Utah Fuel Co.
Attn: Ruth Wayman
397 South 800 West
Salina, Utah 84654

PHONE NUMBER: (435)637-4880**FAX NUMBER:** (435)634-3296

Received
FEB 26 2001
Canyon Fuel Company
SUFCO Mine

SAMPLE DESCRIPTION:

Chemistries to go with Acute Ceriodaphnia Toxicity Test Collected 2/5/01.

Sample Source	Test Performed	Log Number	Test Results
Effluent	Total Hardness, Recon (EPA 130.2)	4358	184 mg/L
	Total Hardness, Effluent (EPA 130.2)	4358	488 mg/L
	Total Hardness, Receiving Water (EPA 130.2)	Na	na mg/L
	Ammonia, Effluent (EPA 350.2/350.3)	4358	<0.05 mg/L
	Ammonia, Receiving Water (EPA 350.2/350.3)	Na	na mg/L
	Initial Chlorine Residual (EPA 330.5)	4358	<0.05 mg/L
	Final Chlorine Residual (EPA 330.5)	4358	na mg/L
	Conductivity, Effluent (EPA 120.1)	4358	1,028 umhos/cm
	Alkalinity, Effluent (EPA 310.1)	4358	258 mg/L CaCO ₃
	Conductivity, Receiving Water (EPA 120.1)	Na	na umhos/cm
	Alkalinity, Receiving Water (EPA 310.1)	Na	na mg/L CaCO ₃
	Recon Initial pH (EPA 150.1)	4358	8.25
	After 24 hours pH (EPA 150.1)	4358	8.36
	100% Initial pH (EPA 150.1)	4358	7.84
	100% After 24 hours pH (EPA 150.1)	4358	8.36
	Receiving Water Initial pH (EPA 150.1)	Na	na
	Receiving Water After 24 hours pH (EPA 150.1)	Na	na

Lee Rawlings
Analyst: Lee Rawlings, Chemist
Water & Environmental Testing, Inc.

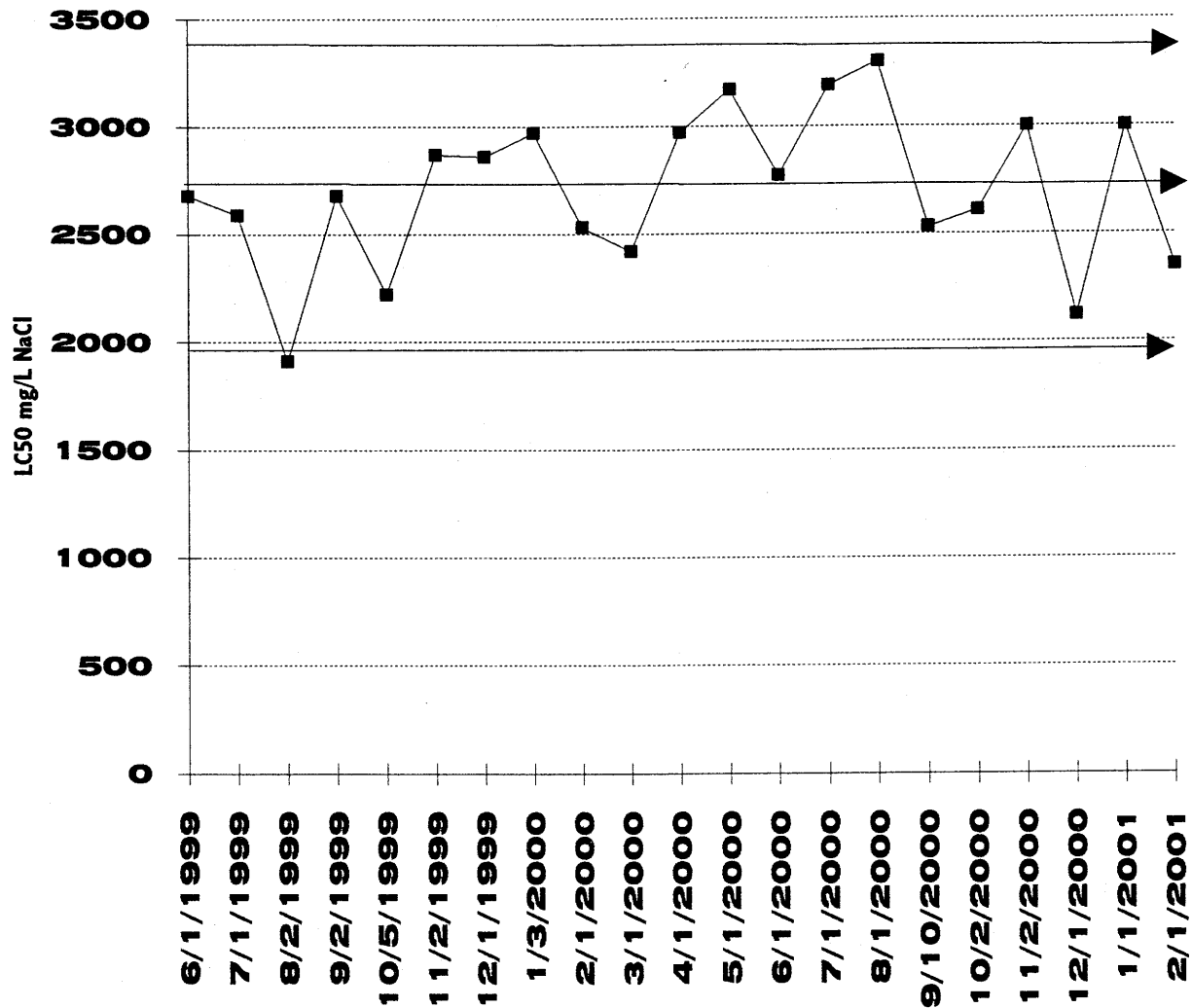
REFTOX.CER Chart 2

Received

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Canyon Fuel Company
SUFCO Mine

Acute Reference Toxicant Ceriodaphnia February 2001



$\bar{X} = 2720$ $2s = 732$ UCL 3452 LCL 1988

W.E.T. Inc.

Water & Environmental Testing Inc. 399 West 1200 North, B Orem, Utah 84057 (801)235-9741 Fax (801)235-9560

Chain of Custody Record

Customer: <u>SUFCO</u>	Sampler: <u>A QUAY MECHAN</u>
Sample Date: <u>020501</u>	Project: <u>PT003</u>

Sample Information

Sample #	Date	Time	Composite/Grab	Location	Analysis Requested
1	020501	0746	"	PT003	ACUTE - CERIODAPHNIA
2	020501	0746	"	PT003	CHRONIC - BOTH SPECIES
3	020501	0746	"	PT003	" "
4	020501	0746	"	PT003	" "

Sample Custody Record

Relinquished by: <u>A Quay Mechan</u>	Received by: <u>Mike Davis</u>	Date/Time: <u>020501 0759</u>
Relinquished by: <u>Mike Davis</u>	Received by: <u>Jukawling</u>	Date/Time: <u>2-5-01 11:25 am</u>
Relinquished by: _____	Received by: _____	Date/Time: <u>Received</u>
Sample Received in Lab by: <u>Jukawling</u>	Date/Time: <u>2-5-01 11:25 am</u>	

FEB 26 2001

Canyon Fuel Company
SUFCO Mine

Comments: UNSAFE TO GET TO STREAM

Temperature Received in the Lab: Effluent: 12.0 1.2°C in
Receiving Water: _____

W.E.T. Inc. Use Only

Cooler: Wet Ice <input checked="" type="checkbox"/> Blue Ice _____ None _____	Hand Delivery <input checked="" type="checkbox"/> W.E.T. Inc. Courier _____ Shipped _____	Arrived in Shipping Container: <input checked="" type="checkbox"/> N Sealed: <input checked="" type="checkbox"/> N / NA	Samples Custody Seals Used: <input checked="" type="checkbox"/> N Intact: <input checked="" type="checkbox"/> N	Samples COC and Labels Match? Yes <input checked="" type="checkbox"/> No _____
Broken / Leaking? Yes _____ No <input checked="" type="checkbox"/>	Correct Containers Used? Yes <input checked="" type="checkbox"/> No _____	Sufficient Quantity Sample? Yes <input checked="" type="checkbox"/> No _____	Sufficient Quantity of Receiving Water? Yes <input checked="" type="checkbox"/> No _____	